## **CLAIMS**

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- 1. A colour photographic element comprising at least one light-sensitive silver halide emulsion layer or a non silver-containing light-insensitive layer, in which at least one of these layers contains a colourless heterocyclic compound having either one or two hetero atoms in the ring or ring system, being other than an imidazole compound, that undergoes less than 10% chemical or redox reaction directly with oxidized developer and which has a partition coefficient to enable the photographic speed of the element to be increased by at least 0.03 stop without increasing granularity, compared to the same element without the compound.
- 2. A colour photographic element as claimed in claim 1 wherein the compound having either one or two hetero atoms in the ring or ring system undergoes less than 5% chemical or redox reaction directly with oxidised developer.
- 3. A colour photographic element as claimed in either of the preceding claims wherein the compound is contained in the most light-sensitive layer of two or more light-sensitive layers having the same spectral sensitivity.
- 4. A colour photographic element as claimed in any one of the preceding claims wherein the compound is located in the green record wherein the maximum spectral sensitivity to light is from 500 to 600nm.
- 5. A colour photographic element as claimed in any one of the preceding claims wherein the silver halide comprises silver iodobromide.
  - 6. A colour photographic element as claimed in any one of the preceding claims wherein the compound has a partition coefficient to enable the photographic speed of the element to be increased by at least 0.10 stop without increasing granularity, compared to the same element without the compound.

- 7. A colour photographic element as claimed in any one of the preceding claims wherein the compound is selected from the class consisting of a thiazole, thiophene, pyrrole, furan, oxazole, pyrazole, pyridine, pyridazine, pyrimidine, pyrazine, oxazine, thiazine, diazepine, oxazepine, thiazepine, pyrrolopyrimidine, quinoline, benzoxazole, naphthyridine, benzoxazepine, indole and benzothiazole.
- 8. A colour photographic element as claimed in any one of the preceding claims wherein the compound has the formula (I):-

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wherein

NHQ is selected from the class consisting of amido, ureido arylamino, carbamate or sulfonamido;

R<sup>1</sup> is a substituent;

Y is carbon or nitrogen; and

Z represents the atoms necessary to complete an unsubstituted or substituted five-, six- or seven-membered ring which may form part of a fused unsubstituted or substituted ring system, the ring or ring system containing either one or two heteroatoms selected from nitrogen, oxygen and sulfur, which may be bridgehead atoms;

provided that if Y is carbon, Z contains one or two heteroatoms but if Y is nitrogen Z must not contain more than one heteroatom.

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- 9. A colour photographic element as claimed in claim 8 wherein Q is or contains an electron-withdrawing group.
- 10. A colour photographic element as claimed in either of claims 8 and 9 wherein Q is or contains a carbonyl or a sulfonyl group.

- 11. A colour photographic element as claimed in claim 10 wherein, when Q is or contains a carbonyl group, the ring or ring system represented by Z contains one or more electron-withdrawing groups.
- 5 12. A colour photographic element as claimed in claim 10 wherein, when Q is or contains a sulfonyl group, the ring or ring system represented by Z is unsubstituted or contains one or more electron-withdrawing or electron-donating groups.
- 10 13. A colour photographic element as claimed in claim 8 wherein, when Q is an aryl group, the ring or ring system represented by Z contains one or more electron-withdrawing groups
- 14. A colour photographic element as claimed in any one of claims 8 to 13 wherein Y is a nitrogen atom.
  - 15. A colour photographic element as claimed in any one of claims 8 to 14 wherein Z represents the atoms necessary to form an unsubstituted or substituted thiazole, pyrimidine or pyridazine ring.

16. A colour photographic element as claimed in any one of claims 8 to 15 wherein the compound has one of the formulae (IIA), (IIB), (IIC) and (IID):-

wherein

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R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are independently selected substituents; and NHQ is selected from the class consisting of an amido, ureido arylamino, carbamato or sulfonamido group.

17. A colour photographic element as claimed in claim 16 wherein R<sup>1</sup> is selected from hydrogen and an unsubstituted or substituted alkyl, aryl, alkoxy, aryloxy, or alkyl- or arylamino group

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- 18. A colour photographic element as claimed in either of claims 16 and 17 wherein, when Q is a carbonyl group, R<sup>1</sup> is an alkyl group which is unsubstituted or substituted with an unsubstituted or substituted aryloxy group.
- 10 19. A colour photographic element as claimed in either of claims 16 and 17 wherein, when Q is a sulfonyl group, R<sup>1</sup> is a substituted aryl group.
  - 20. A colour photographic element as claimed in either of claims 16 and 17 wherein, when Q is an aryl group, R<sup>1</sup> is an alkoxy group.

- 21. A colour photographic element as claimed in any one of claims 8 to 20 wherein at least one of R<sup>2</sup> to R<sup>4</sup> is an electron-withdrawing group.
- 22. A colour photographic element as claimed in claim 21 wherein R<sup>2</sup> to R<sup>4</sup> are independently selected from hydrogen and the class consisting of cyan, formyl, keto, carboxylic acid, mercapto and unsubstituted or substituted alkyl, aryl, alkoxy, aryloxy, alkoxy- or aryloxy-carbonyl, alkyl- or aryl-carbonyl, alkyl- or aryl-thio, alkyl- or aryl-sulfoxyl, alkyl- or aryl-sulfonyl, alkyl- or aryl-carbonamido or two of R<sup>2</sup> to R<sup>4</sup> may join to form a fused ring which does not contain any heteroatoms.
  - 23. A colour photographic element as claimed in any one of the preceding claims wherein the compound having either one or two heteroatoms is selected from the group consisting of

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- 24. A colour photographic element as claimed in any one of the preceding claims wherein when the compound is present in a sensitized layer the ratio of compound to silver is at least 0.1 mmol compound per mol of silver halide.
- 25. A colour photographic element as claimed in any one of claims 1 to 23 wherein when the compound is present in a non-silver-containing layer the laydown of the compound is at least  $3 \times 10^{-5}$  mol/m<sup>2</sup>.

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- 26. A multi-colour photographic element comprising a support bearing yellow, magenta and cyan image-dye-forming units comprising at least one blue-, green- or red-sensitive silver halide emulsion layer having associated therewith at least one yellow, magenta or cyan dye-forming coupler respectively, wherein the element is as claimed in any one of the preceding claims.
- A process of forming an image in a photographic element as hereinbefore defined after the element has been imagewise exposed to light,
  comprising contacting the element as claimed in any one of claims 1 to 26 with a colour developing agent.